



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,073	02/11/2004	Shu-Chin Chen	LIU 199	3424

7590 05/17/2005

RABIN & BERDO, P.C.  
Suite 500  
1101 14th Street, N.W.  
Washington, DC 20005

EXAMINER

GELLNER, JEFFREY L

ART UNIT	PAPER NUMBER
----------	--------------

3643

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center"><b>Office Action Summary</b></p>	<p><b>Application No.</b></p> <p align="center">10/775,073</p>	<p><b>Applicant(s)</b></p> <p align="center">CHEN, SHU-CHIN</p>	
	<p><b>Examiner</b></p> <p align="center">Jeffrey L. Gellner</p>	<p><b>Art Unit</b></p> <p align="center">3643</p>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                         |                                                                             |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                                |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____                                                             | 6) <input type="checkbox"/> Other: _____                                    |

2

*HL*

## **DETAILED ACTION**

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Objections***

Claims 1-7 are objected to because of the following informalities:

Claims 1-7 should be checked for awkward diction and/or terminology. For example, in claim 1, "with clean" should be --with a clean--, "at least one air control equipment" should be --at least one air control device--, and "exhausting air filtration device" should be --exhaust air filtration device--.

In claim 7 the preamble of "apparatus" should be changed to --environmental protection greenhouse--.

Appropriate correction is required for all claims.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-7 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 3643

Claims 1-7 are indefinite because claims 1 and 2 are multiple sentences.

***Claim Rejections - 35 USC §103***

The following is a quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, and 7 are rejected under 35 U.S.C. §103(a) as being unpatentable over Graves (US 3,579,907) in view of Culoso (US 5,871,562) in further view of Delachapelle (US 4,670,223).

As to claim 1, Graves discloses an environmental protection greenhouse (Figs. 1-5) with a clean and airtight cultivation system (from “supporting, insulating environmental barrier” of col. 1 lines 33-34) comprising one airtight greenhouse (from “supporting, insulating environmental barrier” of col. 1 lines 33-34) that is divided into cultivating area (10 of Fig. 1), seedling nursery area (portion of 21, see col. 2 lines 61-64), and a harvest and quality control area (portion of 21, see col. 2 lines 61-64). Not disclosed is the system with at least one air control equipment to facilitate heat exchange, an incoming water filter pool, incoming water pump, incoming water hose, air washing machine, drain, blower, high-pressure blowing hose, incoming air filtration device, and exhausting air filtration device. Culoso, however, discloses at least one air control equipment to facilitate heat exchange Fig. 1), an incoming water filter pool (11 of Fig. 2), incoming water pump (10 of Fig. 2), incoming water hose (4 of Fig. 2), air washing machine (7 of Figs. 1 and 2), drain (12 of Figs. 1 and 2), blower (24 of Fig. 2), high-pressure blowing hose (1 of Figs. 1 and 2); Delachapelle discloses an incoming air filtration

Art Unit: 3643

device (“dessicca-prefilter” of abstract) and an exhaust air filtration device (“second dust filter” of abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the greenhouse of Graves by adding an air control equipment as disclosed by Culoso to treat any odorous air (see Culoso at col. 1 lines 34-42) caused by confinement of the greenhouse and to add two filters as disclosed by Delachapelle so as to make the air free from dust to increase plant health.

As to claim 3, Graves as modified by Culoso and Delachapelle further disclose a continually winding cultivation ditches (Fig. 1 of Graves) that are parallel with movable trays (Fig. 1 of Graves).

As to claim 7, the limitations of Claim 1 are disclosed as described above. Graves as modified by Culoso and Delachapelle further disclose nutrient solution (24 of Fig. 1 of Graves). Not disclosed is a nutrient solution system with a filter, heater, cooler, pump, and preparation tank. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the greenhouse of Graves as modified by Culoso and Delachapelle by having a system for the nutrient solution system with a filter, heater, cooler, pump, and preparation tank so as to optimize the solution for the plants.

***Allowable Subject Matter***

Claims 2 and 4-6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Art Unit: 3643

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Charney, Wi, Goldstein et al., Cole et al., Landstrom et al., Visser, Kawabe et al., Wittlin, and Fisher disclose in the prior art various greenhouse or conveyor systems. Fornai et al., Weng, and Reed disclose in the prior art various air filter systems.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Jeffrey L. Gellner whose phone number is 571.272.6887. The Examiner can normally be reached Monday through Thursday from 8:30 am to 4:00 pm. The Examiner can also be reached on alternate Fridays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Peter Poon, can be reached at 571.272.6891. The official fax telephone number for the Technology Center where this application or proceeding is assigned is 703.872.9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jeffrey L. Gellner  
Primary Examiner